



Minneapolis
City of Lakes

February 13, 2015

**Community Planning &
Economic Development**

Division of Long Range Planning
105 5th Avenue South, Suite 200
Minneapolis, MN 55401

Janet Hutzell
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

**RE: Response to Notice of Draft License Application and Draft Preliminary Draft
Environmental Assessment and Request for Preliminary Terms and Conditions for
Minneapolis Leased Housing Associates IV, Limited Partnership,
Project No. 14628-000**

Dear Ms. Hutzell,

The purpose of this letter is to provide comments from the City of Minneapolis on the Draft License Application and Draft Preliminary Draft Environmental Assessment and Request for Preliminary Terms and Conditions for Minneapolis Leased Housing Associates IV, Limited Partnership, Project No. 14628-000 in response to the notice released January 21, 2015.

Generally speaking, the City of Minneapolis is in favor of this project. It is an exemplary case of integrating forward-looking green technology with the opportunity to interpret the city's important past in a way that invites the public to understand and learn about both. It reflects the City's commitment to the preservation and rehabilitation of the Pillsbury "A" Mill Complex.

The Pillsbury "A" Mill Complex is a nearly eight acre site set at the foot of St. Anthony Falls on the east bank of the Mississippi River. The complex consists of eight buildings, two rail spur corridors that contained several rail lines, several vacant parcels that once house former buildings and features of the complex and the "A" Mill water power infrastructure (head race and tail race tunnels that provided hydro power to the complex.) Together these features create the cultural landscape of the complex

The Pillsbury "A" Mill is one of 23 National Historic Landmarks in Minnesota and one of less than 2,500 nationwide. As stated on its National Register nomination form, "Only one of the giant flour mills that made Minneapolis the milling capital of the nation from 1880 until 1930 still stands. The Pillsbury "A" Mill was the largest, most advanced mill in the world at its completion in 1881. From a 4,000 barrel-a-day capacity in 1882, it eventually grew to 17,500. The "A" Mill was a masterpiece of industrial design, a standard from which all other mills of its time were measured."

The local and national historic significance of the site has been clearly demonstrated. The site is also significant for its rehabilitation potential. The rehabilitation and sensitive development of site will enhance density and be catalytic in efforts to bolster the St. Anthony Falls Historic District. The site has the real capability of reusing the historic waterpower infrastructure to provide district energy, heating and cooling to the complex. A feasibility study and a scoping study have been completed and next steps are underway to make this a reality. This may

be the only project of this scale in the nation to reuse existing milling waterpower infrastructure that once powered the mill for district energy.

Managing this important resource will require a sustained and coordinated effort into the future. Going forward, we suggest three elements that will need to be addressed:

1. A Historic Resource Management Plan that details how the site will be operated for generating energy to the complex and for (eventually) operating an interpretive center within the complex. The management plan is intended to cover operation of the whole – both private and public functions.
2. A Historic Property Maintenance Plan that describes anticipated maintenance and repair needs for the property for a period of no less than ten (10) years. Historic resource maintenance plan shall include a list of all critical property features, components, and systems and shall include description of anticipated maintenance, alterations, and minor alterations, prioritization of anticipated work, the probable sequence for anticipated work, estimated dates of related work, anticipated longevity of maintenance, repairs and replacements, and a description of how anticipated maintenance, alterations, and minor alterations will be undertaken in compliance with local regulations.
3. A Water Resources Plan that details when, where, and how much water is taken from the river, where it goes, and how it returns to the river. The water resources plan is intended to be a regular, annual update to the terms and conditions of which the FERC license is granted. This is related to Xcel Energy's Aesthetic Flow Adequacy Plan, and the pending FERC decision on this plan.

As a condition of the license being granted, it is proposed that the City of Minneapolis will be a recipient of updates and annual reports to the Historic Property Maintenance Plan and the Water Resources Plan and as needed updates to the Historic Resource Management Plan.

Attached below are some specific comments, organized by page number, on the draft documents distributed for review.

We appreciate the opportunity to participate in this comment period.

Regards,

D. Craig Taylor
Executive Director
Community Planning and Economic Development
City of Minneapolis

Specific Comments on A Mill FERC License Application and Environmental Assessment

Page numbers refer to PDF page numbers, since document doesn't have consistent numbering throughout

- General – Given the early time at which the tunnel system was built, the ownership of the system is not as clearly documented (e.g., via easements, etc.) as would be true if it were built today. The City supports the applicant's interpretation that, as party to the water rights lease and successor owner of the property once owned by the Pillsbury Company at this location, MLHA has the right to use the tunnel system components as proposed in this application. We note, however, that these rights also imply the commensurate responsibility to maintain the tunnel system even though it runs under property owned by other parties.
- General – The City is aware of (and strongly supports) MLHA's plans to also use water from the Mississippi River flowing through the tunnel system to generate hydrothermal heating and cooling for the A-Mill Artist Lofts housing development. While that use of the water does not require a FERC license, we are curious if and how the two systems will inter-relate. For example, will some of the water flowing through the penstock be diverted for the hydrothermal use and then returned to the penstock, or will the water supply for hydrothermal be separate from hydroelectric system?
- General – There are various references to once again using the tunnel system for hydropower. That implies that it once was used for generating hydroelectric power, and I don't think it ever was. I certainly agree that the proposed hydroelectric use is within the same spirit as the earlier use, but might it be worth noting that the original use was for direct-drive hydropower generation (or I think in one place it used the term "hydro-mechanical power"), as distinct from the proposed hydroelectric power generation?
- General - The *Mead and Hunt Pillsbury A Mill Tunnel Historic and Engineering Condition Study* states the following: "Based on the current hydrothermal and hydroelectric concept plans, the existing tunnel segment will be suitable for the proposed hydrothermal and hydroelectric systems, provided the recommended maintenance repairs are performed and the condition of the tunnel is routinely inspected and maintained." Do you plan to follow the recommended rehabilitation and maintenance work of the tunnels as outlined in *The Mead and Hunt Pillsbury A Mill Tunnel Historic and Engineering Condition Study* that was attached to the environmental assessment? The study was included as an appendix, but it was not referenced in the environmental assessment. Detail where you will be following the recommended rehabilitation and maintenance work from the study and where you will be deviating from it. This should include addressing the following:
 - Will the installation of the penstock and saddles for the hydroelectric be done in a way to accommodate for the possibility of hydrothermal in a way that has the least disturbance to the tunnels and possible interpretive center?
 - Will you replace the damaged brickwork on the inland side forebay wall in kind as recommended by *The Mead and Hunt Pillsbury A Mill Tunnel Historic and Engineering Condition Study* report?
 - Proposed work to the catch basins is not mentioned in the environmental assessment. The *Mead and Hunt Pillsbury A Mill Tunnel Historic and Engineering Condition Study* stated the following about the catch basins: "One potential consideration is the existence of catch basins located on Main Street Southeast, which discharge into the tunnel. The discharge of storm water into the tunnel could lead to corrosion concerns with the hydrothermal and hydroelectric

pipng and support system. In addition, these locations could allow other undesirable materials into the tunnel including fuel spills, debris, and other chemicals.”

- Do you plan to do the work to the sluice gate support, sluice gates and shaft as recommended by the Mead and Hunt Pillsbury A Mill Tunnel Historic and Engineering Condition Study?
“Based on the current hydrothermal and hydroelectric concept plans, the existing drop shaft and channel structure will require modifications for the proposed hydrothermal and hydroelectric systems. The timber sluice gate support should be removed in conjunction with the sluice gates. The top and bottom extents of the steel shaft liner will likely require trimming to facilitate installation of piping and the turbine. Consideration should also be given to applying a protective coating to the shaft to extend its useful design life and functionality.”
- What is the plan for the steel gate and the lower steel pipe penetration when the tunnel is retrofitted for hydroelectric power? The Mead and Hunt Pillsbury A Mill Tunnel Historic and Engineering Condition Study states the following: “When the tunnel is retrofitted for hydroelectric power a new penetration will be constructed through the existing bulkhead. To perform these modifications, a cofferdam will likely be constructed around the intake structure to allow access. At that time, we would recommend either replacing the sliding steel gate with a more durable material or permanently sealing the penetration. The lower steel pipe penetration should also be permanently sealed.”
- Page 5 – Final project schematics and renderings should be made available when complete, to ensure that sufficient effort is being made to keep or restore the exterior elements of the structure to be historically consistent.
- Page 11, last paragraph – It’s appreciated that they agree to follow Xcel Energy’s Aesthetic Flow Adequacy Plan, as requested by the City and other stakeholders. Does MLHA have enough cash flow in its financial projections that the project would remain financially feasible even if the minimum flow level were increased (e.g., to the 2,000 cfs requested by the Park Board) and thus the amount of water available for the A Mill project were proportionately reduced?
- Page 29, top paragraph – Are we now up to 22 Landmarks now that Christ Church Lutheran was recognized?
- Page 38, 2.2.4.4 – The condition study funded by the Legacy grant includes an archaeological fieldwork plan. If MLHA follows the procedures in the cited state law (and whatever else SHPO requires of them), will that get to the same place or should we recommend that they also be required to follow the plan Mead & Hunt prepared?
- Page 76 re: Recreation – It’s my recollection that one of the FERC requirements is that a licensed project must offer some recreational benefits, even if none exist on or near the site. Two possible ways that MLHA could do that (using perhaps a broad definition of “recreation”) would be to cooperate with:
a) the implementation of a tunnel interpretive center in the basement of the A Mill and the headrace tunnel, and b) the re-creation of the East Falls if water flowing through the tunnel would assist that. The former might imply shifting the location of the penstock within the headrace to the side to allow room for visitors to walk down the tunnel and also perhaps changing the shape of the penstock at the forebay arch to provide a bit more headroom. It maybe is premature for MLHA to make any firm commitments, but it would be good to at least see some reference to those possibilities (especially the interpretive center) and a willingness to further explore them.

- Page 77 – The study notes that boating is not “actively encouraged.” Actually, a significant percentage of the traffic through the lock and dam system in this area has been recreational. This is changing, particularly with the permanent closure of the Upper St. Anthony Falls lock in 2015. But as noted, there is still a canoe route, with a portage near this project site to allow boaters to bypass the falls.
- Page 78 – The Mississippi Central Riverfront Regional Park is being renamed the St. Anthony Falls Regional Park, as part of the regional park master plan currently underway by the Minneapolis Park and Recreation Board. Improvements to the area in and around the intake and outlet of this project have the potential to benefit the appearance of the parkland in this area.
- Page 80, first bullet – Not all of the Heritage Trail is asphalt, and the more important part of the trail (which merits noting in the EA) is the series of interpretive markers and signs along the route that allow it to be self-guided. There are guided tours of parts of the trail (e.g., MHS and Segways), but I don’t know if those cover the entire trail, so maybe the text should say “Guided tours of some or all of the trail are available...”
- Page 80, third bullet – The recreational parkway extends upriver from Portland, too, although the formal name does switch from West River Parkway to James I. Rice Parkway at Portland.
- Page 80, fourth bullet – Once the USAF lock closes, the visitor center won’t be open (unless another partner takes that on).
- Page 81 – The regional park plan update noted above may include improvements to the area immediately surrounding this project area, in terms of landscaping, amenities, and other features.
- Page 86, third line – It seems more correct to say that the flow was used for “direct-drive lumber and flour milling” than “power and wheat milling.”
- Page 86, third line – It doesn’t seem correct to call that corner the “northwest” corner of the A Mill. “Southwest” or “western-most” seem closer, unless they’re picturing that the river runs north to south...
- Page 87, last full paragraph, sixth line – The St. Anthony Falls Historic District boundary is at Sixth Avenue SE, not Fifth.
- Page 89, Tunnel and Drop Shaft -- One thing that doesn’t seem to be noted anywhere is whether the new intake will still allow any moving water into the main headrace tunnel. It’s a given that there will be some water that gets in there, from seepage if nothing else, and it would be better to have moving water that won’t freeze than to have still water that might freeze in the winter and thus expose the tunnel to freeze/thaw cycles. I’m not sure whether this is where that information would go, but it seems like a possibility.
- Page 92, paragraph above “Aesthetic Flows” – The Minneapolis Park and Recreation Board should be included in the list of entities that played major roles in riverfront redevelopment.
- Page 93, table 3-7 – If there isn’t any minimum flow requirement from November 15 to March 15, perhaps that should be made clear.
- Page 94 – It is appreciated that the plan includes references to other plans and documents highlighted in earlier City comments.

- Page 96, 4.0 – Same question as to whether the project would remain feasible if the minimum flow for aesthetic purposes were increased. Should we recommend that the Final Application include data that tests that possibility?
- Page 109 – The City appreciates the inclusion of and reference to the Pillsbury A Mill Tunnel Historic and Engineering Condition Study in this document.
- Page 154 – As stated in the tunnel study, based on the current hydrothermal and hydroelectric concept plans, the existing tunnel segment will be suitable for the proposed hydrothermal and hydroelectric systems, provided the recommended maintenance repairs are performed and the condition of the tunnel is routinely inspected and maintained. Presumably, this will be part of the scope of this project and its ongoing operation and maintenance.
- Page 168 – The downriver tailrace condition is rated as poor, with several structural deficiencies noted. Several other elements had similar noted deficiencies. Presumably, this will be addressed within the scope of the construction project.
- Page 373 – The hydraulic modeling report notes that the flow of water will flush out accumulated sediment in this area since the facility was deactivated in the 1950's. This will require some monitoring over time, as the area transitions to its new state. Presumably this will occur, in cooperation with other partners and regulatory agencies. The industrial history of this area may mean that some of this sediment is contaminated, as noted in the EAW later.
- Page 426 Historic Preservation Certification Application -- There are two photos labeled "Intake Structure" that actually are the headrace tunnel instead.